REMARKS

The claims are claims 1 to 20.

Claims 1, 4, 7, 10, 15 and 16 have been further amended to make clear that the iterative technique supplies filter coefficients for additional digital filters. These claims include language strongly implying that each iteration provides an additional digital filter. The amended language makes this explicit.

Claims 1 to 9 and 14 to 19 were rejected under 35 U.S.C. 103(a) as made obvious by the combination of Gauthier WO 90/09760 and Op de Beek U.S. Patent No. 4,845,758.

Claims 1, 4, 7, 15 and 16 recite subject matter not anticipated by Gauthier. Claims 1, 4, 7, 15 and 16 each recite iterative processes which generate "digital filter coefficients controlling center frequency, filter bandwidth and amplitude for a succession of additional digital audio filters." These claims further recite continuing iterations until a response curve is within a tolerance range or "a predetermined limit on the number of digital audio filters has been reached, whichever occurs first." This language requires that digital filters be instantiated one at a time with no more used than required to fit the response curve within the tolerance range. This language makes clear that the number of filters is variable and selected iteratively to provide the desired filtering. The language "until...a predetermined limit on the number of digital audio filters has been reached" would not be meaningful unless this invention adds digital filters. Gauthier teaches at page 27, line 15 to page 8, line 1 a fixed number of filter banks that are always used. While Gauthier does teach an iterative filter definition processes, this is not based upon adding digital filters as required by claims 1, 4, 7, 15 and 16. Op de Beek teaches a fixed number of filters at column 5, lines 37

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to 39, which states:

"FIG. 1 shows an equaliser 1 with n series-arranged band filters F_1 to F_n between the input 2 and the output 3."

This language states that Op de Beek uses n filters. In the absence of any indication that Gauthier or Op de Beek teach a variable number of digital filters, claims 1, 4, 7, 15 and 16 are allowable over the combination of Gauthier and Op de Beek.

Claims 2, 4, 5, 8 and 17 recite subject matter not made obvious by the combination of Gauthier and Op de Beek. Claims 2, 4, 5, 8 and 17 each recite that the digital filters are second order filters. Gauthier fails to disclose any digital filter. Gauthier fails to disclose second order filters. The portion of Gauthier cited in the FINAL REJECTION as allegedly anticipating this subject matter (filters 516 to 528 of Figure 5 and page 15, lines 10 to 15) fail to teach either digital filters or second order filters. Op de Beek does teach digital filters but likewise fails to teach second order digital filters. Accordingly, claims 2, 4, 5, 8 and 17 are allowable over the combination of Gauthier and Op de Beek.

Claim 14 recites subject matter not anticipated by Gauthier. Claim 14 recites an apparatus including "a source of first audio digital data corresponding to analog audio signals having a selected frequency and multiple power levels." This claim recites a technique taught with respect to Figure 6 of this application where the user's hearing is tested by supplying audio digital signals to the hearing aid bypassing the microphone and analog to digital converter. Gauthier fails to disclose supply of audio digital signals to the hearing aid in this testing mode. Figures 3 and 4 of Gauthier illustrate supplying analog audio signals from signal generator 320 to the hearing aid for testing the user's

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hearing. The portion of Op de Beek cited in the FINAL REJECTION (column 5, line 37 to column 6, line 18) teaches a hearing aid with a digital filter. This fails to teach testing a user's hearing using audio digital signals to the hearing aid as test tones. Accordingly, claim 14 is allowable over the combination of Gauthier and Op de Beek.

Claim 10 was rejected under 35 U.S.C. 103(a) as made obvious by the combination of Gauthier WO 90/09760 and Sjursen U.S. Patent No. 6,292,571.

Claim 10 recites subject matter not made obvious by the combination of Gauthier and Sjursen. Claim 10 recites a method including "generating and providing a first series of audio digital signals to said hearing aid, each digital signal in said first series of signals corresponding to an analog audio signal having a selected frequency and multiple power levels." This claim recites a technique taught with respect to Figure 6 of this application where the user's hearing is tested by supplying audio digital signals to the hearing aid bypassing the microphone and analog to digital converter. Gauthier fails to disclose supply of digital signals to the hearing aid in this testing mode. Figures 3 and 4 of Gauthier illustrate supplying analog audio signals from signal generator 320 to the hearing aid for testing the user's hearing. The portion of Sjursen cited in the FINAL REJECTION (Figures 7 to 23 and column 4, lines 7 to 47) fails to make obvious this subject matter. The frequency response curves of Figures 7 to 23 cannot make obvious the provision of audio digital signals to the hearing aid for testing as claimed. Column 4, lines 7 to 47 of Sjursen discloses a hearing aid with an ADC, a digital signal processor for digital filtering and a DAC. This portion of Sjursen fails to disclose testing hearing by supplying audio digital signals to the hearing aid. Accordingly, claim 10 is allowable over the combination of Gauthier and Sjursen.

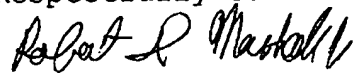-15-

Claim 20 has been allowed.

The Applicants respectfully request entry and consideration of this amendment. Entry of this amendment is proper at this time because the amendment serves only to clarify subject matter previously recited. Thus no new search or reconsideration is required.

The Applicants respectfully submit that all the present claims are allowable for the reasons set forth above. Therefore early entry of this amendment, reconsideration and advance to issue are respectfully requested.

If the Examiner has any questions or other correspondence regarding this application, Applicants request that the Examiner contact Applicants' attorney at the below listed telephone number and address to facilitate prosecution.

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Respectfully submitted,

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